

Amendments to the Claims:

- 1) Please cancel claims 21 and 23 without prejudice or disclaimer of the subject matter thereof.
- 2) Please amend claims 14, 18, 22, 24 and 29.

Listing of Claims:

Claims 1-13 (Canceled).

Claim 14 (Currently amended): A retractable fin device for steering or stabilizing a motorized watercraft having at least one hull, said retractable fin device comprising:
at least two operating units each having at least one retractable fin, said retractable fins of each operating unit being contained in tubular watertight casings open on the bottom and located for their prevailing portion inside the hull, one on the starboard side and the other on the port side;
an actuator associated with each of said operating units for moving said fins outwards and inwards out of the hull during the navigation for a variable extent in the water; and
a guide part coupled to the root of said retractable fin sliding outward and inward into said watertight tubular casing;
wherein said tubular casing and said sliding guide having both prevailing rectangular or prismatic section in order to avoid any tilting rotation of said fin along its axis when moved[.];
wherein each of said fins being connectable to said guide closed at the base and open at the top, characterized in that said guide can slide within said tubular casing and has a section similar to that of said tubular casing, said guides being reduced in scale to said tubular casing permitting the eventual interposition of suitable anti-friction elements fitted to said guide;
wherein said tubular casing of said operating units is made from a generally rectangular section made from material suitable for the type of hull, said casing being provided with at least one flange on its top to receive a watertight cover and an additional flange for its secure fixing to the hull, said additional flange being provided with a slot to allow the movement of

said fin with a clearance which is sufficient to allow the water to flow out and in.

Claim 15 (Original): The retractable fin device according to claim 14, wherein said fin of each of the said operating units have a wing-like profile with a constant angle of incidence.

Claim 16 (Original): The retractable fin device according to claim 14, wherein said fin of each of the said operating units have a variable angle of attack between the tip and the root to provide progressive action during its immersion.

Claim 17 (Original): The retractable fin device according to claim 14, wherein said tubular casing of each operating unit has a pit-like form, and a generally rectangular configuration.

Claim 18 (Currently amended): The retractable fin device according to claim 17, wherein said actuators of said operating units are interconnected and maneuverable so that said respective fins can be moved individually and preferably alternatively in the water flow for a different extent in one side or on the other one, causing in this way reaction forces of variable entity on the hull capable to steering or reducing the rolling effect.

Claim 19 (Original): The retractable fin device according to claim 14, wherein said tubular casings of said operating units are located symmetrically in a transversal section preferably located in astern area in case of the units employed as steering device and between stern and middle ship in case of the units employed for stabilizing purpose.

Claim 20 (Original): The retractable fin device according to claim 19, wherein said actuators of said operating units are interconnected and maneuverable so that said respective fins can be retracted during sailing on calm waters or projected in the water totally or partially on one side or on the other one during sailing in rough seas, so as to act as stabilizing fins by creating a rotational torque on the longitudinal axis of the hull to oppose the effect of the roll.

Claim 21 (Cancelled).

Claim 22 (Currently amended): The retractable fin device according to claim [[21]]20, wherein said fins are made from any sufficiently strong material selected from

the group consisting of bronze, stainless steel, and titanium alloy, said fins having a substantially concave profile.

Claim 23 (Cancelled).

Claim 24 (Currently amended): The retractable fin device according to claim [[23]]14, wherein each of said operating unit having at its top said actuator, said actuator consisting of a conventional double-acting hydraulic cylinder having a strong rod connectable to a base of said guide or to said fin, in order to move the latter vertically, while the body of said cylinder is connected, directly or by means of an interposed flange, to said cover of said tubular casing.

Claim 25 (Original): The retractable fin device according to claim 24, wherein each of said operating unit being provided with said double-acting cylinder having two concentric walls spaced to form a gap through which the oil for supplying a lower chamber of said cylinder can flow, thus allowing the oil to enter said cylinder at its top instead of at its base.

Claim 26 (Original): The retractable fin device according to claim 25 further comprising a connection being provided between said rod of said cylinder and said guide which in turn is secured to said fin, said connection being formed in such a way as to ensure that said guide can slide freely within said tubular casing, without jamming on said rod, said rod being provided for this purpose with a terminal disc which can transmit the thrust upwards and downwards, but since it is contained in a housing between said guide and said fin provided with sufficient radial clearance, can allow it to move freely.

Claim 27 (Original): The retractable fin device according to claim 26 further comprising a hydraulic circuit containing a pair of sequence valves fitted on the tops of said cylinders, to control the downward movement of one said fin only after said corresponding fin on the opposite side has been fully retracted, said sequence valves being provided with non-return valves operated directly by extensions of corresponding pistons which at the end of their strokes can raise push rods of valve shutters, thus enabling the oil to flow through them and supply said opposite cylinders.

Claim 28 (Original): A retractable fin device for steering or stabilizing a motorized watercraft having at least one hull, said retractable fin device comprising:

at least two operating units each having a retractable fin;
a tubular watertight casing associated with each of said operating units, said tubular casings each having at least one flange on its top to receive a watertight cover and an additional flange for its secure fixing to the hull, said additional flange being provided with a slot to allow the movement of said fin with a clearance which is sufficient to allow the water to flow out and in, said retractable fins of each operating unit being contained in said tubular casings, said casing being open on the bottom and located for their prevailing portion inside the hull, one on the starboard side and the other on the port side, said tubular casings have a generally rectangular configuration;

a guide connectable to each of said fins, said guides being closed the base and open at the top, said guides being characterized in that said corresponding fin can slide within said tubular casing and has a section similar to that of said tubular casing, said guides being reduced in scale to said tubular casing permitting the interposition of suitable anti-friction elements fitted to said guide; and

an actuator attachable to each of said fins or guides for moving said fins outwards and inwards out of the hull during the navigation for a variable extent in the water, said actuators each consisting of a conventional double-acting hydraulic cylinder having a strong rod connectable to a base of said guide or to said fin, in order to move the latter vertically, while the body of said cylinder is connected, directly or by means of an interposed flange, to said cover of said tubular casing;

wherein said double-acting cylinders each having two concentric walls spaced to form a gap through which the oil for supplying a lower chamber of said cylinder can flow, thus allowing the oil to enter said cylinder at its top instead of at its base.

Claim 29 (Currently amended): The retractable fin device according to claim 28, wherein said tubular casings of said operating units are located symmetrically in a transversal section—preferably located in astern area in case of the units employed as

steering device and between stern and middle ship in case of the units employed for stabilizing purpose.

Claim 30 (Original): The retractable fin device according to claim 29, wherein said actuators of said operating units are interconnected and maneuverable so that said respective fins can be retracted during sailing on calm waters or projected in the water totally or partially on one side or on the other one during sailing in rough seas, so as to act as stabilizing fins by creating a rotational torque on the longitudinal axis of the hull to oppose the effect of the roll.

Claim 31 (Original): The retractable fin device according to claim 30 further comprising a connection being provided between said rod of said cylinder and said guide which in turn is secured to said fin, said connection being formed in such a way as to ensure that said guide can slide freely within said tubular casing, without jamming on said rod, said rod being provided for this purpose with a terminal disc which can transmit the thrust upwards and downwards, but since it is contained in a housing between said guide and said fin provided with sufficient radial play, can allow it to move freely.

Claim 32 (Original): The retractable fin device according to claim 31 further comprising a hydraulic circuit containing a pair of sequence valves fitted on the tops of said cylinders, to control the downward movement of one said fin only after said corresponding fin on the opposite side has been fully retracted, said sequence valves being provided with non-return valves operated directly by extensions of corresponding pistons which at the end of their strokes can raise push rods of valve shutters, thus enabling the oil to flow through them and supply said opposite cylinders.

Claim 33 (Original): The retractable fin device according to claim 32, wherein said fins are made from any sufficiently strong material selected from the group consisting of bronze, stainless steel, titanium alloy, and carbon fiber, said fins having a substantially concave profile.

Claim 34 (Original): A retractable fin device for steering or stabilizing a motorized watercraft having at least one hull, said retractable fin device comprising:

at least two operating units each having a retractable fin;

a tubular watertight casing associated with each of said operating units, said tubular casings each having at least one flange on its top to receive a watertight cover and an additional flange for its secure fixing to the hull, said additional flange being provided with a slot to allow the movement of said fin with a clearance which is sufficient to allow the water to flow out and in, said retractable fins of each operating unit being contained in said tubular casings, said casing being open on the bottom and located for their prevailing portion inside the hull, one on the starboard side and the other on the port side, said tubular casings have a generally rectangular configuration;

a guide connectable to each of said fins, said guides being closed the base and open at the top, said guides being characterized in that said corresponding fin can slide within said tubular casing and has a section similar to that of said tubular casing, said guides being reduced in scale to said tubular casing permitting the interposition of suitable anti-friction elements fitted to said guide and consisting of strips;

an actuator attachable to each of said fins or guides for moving said fins outwards and inwards out of the hull during the navigation for a variable extent in the water, said actuators each consisting of a conventional double-acting hydraulic cylinder having a strong rod connectable to a base of said guide or to said fin, in order to move the latter vertically, while the body of said cylinder is connected, directly or by means of an interposed flange, to said cover of said tubular casing, said double-acting cylinders each having two concentric walls spaced to form a gap through which the oil for supplying a lower chamber of said cylinder can flow, thus allowing the oil to enter said cylinder at its top instead of at its base;

a connection being provided between said rod of said cylinder and said guide which in turn is secured to said fin, said connection being formed in such a way as to ensure that said guide can slide freely within said tubular casing without jamming on said rod, said rod being provided with a terminal disc which can transmit the thrust upwards and downwards, and being

contained in a housing between said guide and said fin providing sufficient radial clearance to move freely; and

a hydraulic circuit containing a pair of sequence valves fitted on the tops of said cylinders to control the downward movement of one said fin only after said corresponding fin on the opposite side has been fully retracted, said sequence valves being provided with non-return valves operated directly by extensions of corresponding pistons which at the end of their strokes can raise push rods of valve shutters, thus enabling the oil to flow through them and supply said opposite cylinders;

wherein said tubular casings of said operating units are located symmetrically in a transversal section preferably located in astern area in case of the units employed as steering device and between stern and middle ship in case of the units employed for stabilizing purpose;

wherein said actuators of said operating units are interconnected and maneuverable so that said respective fins can be retracted during sailing on calm waters or projected alternatively in the water totally or partially on one side or on the other one during sailing in rough seas, so as to act as stabilizing fins by creating a rotational torque on the longitudinal axis of the hull to oppose the effect of the roll.